

REMARKS

The Office Action dated April 3, 2007, has been received and carefully considered. In this response, claims 1, 6, 13, and 22 have been amended, and claims 27 and 28 have been added. Entry of the amendments to claims 1, 6, 13, and 22, and the addition of claims 27 and 28 is respectfully requested. Reconsideration of the outstanding objections/rejections in the present application is also respectfully requested based on the following remarks.

I. THE OBJECTION TO CLAIM 6

On page 2 of the Office Action, claim 6 was objected to under 37 CFR § 1.75 as being a substantial duplicate of claim 5.

Claim 6 has been amended to address the Examiner's concerns.

In view of the foregoing, it is respectfully requested that the aforementioned objection to claim 6 be withdrawn.

II. THE ANTICIPATION REJECTION OF CLAIMS 1-9 AND 13-26

On page 2-3 of the Office Action, claims 1-9 and 13-26 were rejected under 35 U.S.C. § 102(b) as being anticipated by Sevrain (U.S. Patent Application Publication No. US2003/0135216A1). This rejection is hereby respectfully traversed with partial amendment.

Under 35 U.S.C. § 102, the Patent Office bears the burden of presenting at least a prima facie case of anticipation. In re Sun, 31 USPQ2d 1451, 1453 (Fed. Cir. 1993) (unpublished). Anticipation requires that a prior art reference disclose, either expressly or under the principles of inherency, each and every element of the claimed invention. Id. "In addition, the prior art reference must be enabling." Akzo N.V. v. U.S. International Trade Commission, 808 F.2d 1471, 1479, 1 USPQ2d 1241, 1245 (Fed. Cir. 1986), cert. denied, 482 U.S. 909 (1987). That is, the prior art reference must sufficiently describe the claimed invention so as to have placed the public in possession of it. In re Donohue, 766 F.2d 531, 533, 226 USPQ 619, 621 (Fed. Cir. 1985). Such possession is effected only if one of ordinary skill in the art could have combined the disclosure in the prior art reference with his/her own knowledge to make the claimed invention. Id.

Regarding claim 1, the Examiner apparently asserts that Sevrain discloses the claimed invention. However, it is respectfully submitted that Sevrain fails to disclose, or even suggest, a vertebral screw having a shaft provided with a threaded portion configured to threadingly engage a vertebral body of a vertebra, the shaft having an engaging portion extending partially therethrough, as presently claimed. Indeed, Sevrain teaches away from such a claimed feature by explicitly

disclosing a through opening 12. It is respectfully submitted that the claimed engaging portion extending partially through the claimed vertebral screw provides a rigid locking connection between the claimed vertebral screw and the claimed connecting screw (see paragraphs [0113]-[0116] of U.S. Patent Application Publication No. US2004/0193161A1). Such a rigid locking connection may not be achieved by the arrangement of Sevrain since the through opening 12 allows second screw 20 to be freely engaged and disengaged in first screw 10. Accordingly, is it respectfully submitted that claim 1 is allowable over Sevrain.

Regarding claims 2-9, these claims are dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claims 2-9 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

Regarding claim 13, the Examiner apparently asserts that Sevrain discloses the claimed invention. However, it is respectfully submitted that Sevrain fails to disclose, or even suggest, a pedicle screw having a shaft provided with a threaded portion configured to threadingly engage a vertebra, the shaft having an engaging portion extending partially therethrough, as claimed. Indeed, Sevrain teaches away from such a claimed

feature by explicitly disclosing a through opening 12. It is respectfully submitted that the claimed engaging portion extending partially through the claimed pedicle screw provides a rigid locking connection between the claimed pedicle screw and the claimed connecting screw (see paragraphs [0113]-[0116] of U.S. Patent Application Publication No. US2004/0193161A1). Such a rigid locking connection may not be achieved by the arrangement of Sevrain since the through opening 12 allows second screw 20 to be freely engaged and disengaged in first screw 10. Accordingly, it is respectfully submitted that claim 13 is allowable over Sevrain.

Regarding claims 14-20, these claims are dependent upon independent claim 13. Thus, since independent claim 13 should be allowable as discussed above, claims 14-20 should also be allowable at least by virtue of their dependency on independent claim 13. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

Regarding claim 21, the Examiner apparently asserts that Sevrain discloses the claimed invention. However, it is respectfully submitted that Sevrain fails to disclose, or even suggest, a bore screw having a shaft and a threaded portion and configured to bore an opening in the vertebra for placement of the pedicle screw, as claimed. The Examiner asserts (at least

with respect to claim 22) that Sevrain teaches that lower screw 10 is capable of being used as a bore screw for upper screw 20. Sevrain teaches nothing of the sort. Indeed, Sevrain never discloses or even suggests in any manner that lower screw 10 is used with upper vertebra V1, let alone that it is capable of being used as a bore screw for upper screw 20. Accordingly, is it respectfully submitted that claim 21 is allowable over Sevrain.

At this point Applicants would like to remind the Examiner that, as stated in MPEP § 2131, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Regarding claim 22, the Examiner apparently asserts that Sevrain discloses the claimed invention. However, it is respectfully submitted that Sevrain fails to disclose, or even suggest, a pedicle screw having a shaft provided with a threaded portion configured to threadingly engage a vertebra, the shaft having an engaging portion extending partially therethrough, as claimed. Indeed, as discussed above, Sevrain teaches away from such a claimed feature by explicitly disclosing a through opening 12. It is respectfully submitted that the claimed engaging portion extending partially through the claimed pedicle

screw provides a rigid locking connection between the claimed pedicle screw and the claimed connecting screw (see paragraphs [0113]-[0116] of U.S. Patent Application Publication No. US2004/0193161A1). Such a rigid locking connection may not be achieved by the arrangement of Sevrain since the through opening 12 allows second screw 20 to be freely engaged and disengaged in first screw 10. Accordingly, it is respectfully submitted that claim 22 is allowable over Sevrain.

Regarding claims 23-26, these claims are dependent upon independent claim 22. Thus, since independent claim 22 should be allowable as discussed above, claims 23-26 should also be allowable at least by virtue of their dependency on independent claim 22. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination. For example, claim 26 recites that the pedicle screw has a coupling portion configured to couple with a guide member, and that the combination further includes a guide member configured to couple with the coupling portion of the pedicle screw (e.g., see guide member 150). Sevrain fails to disclose or even suggest such claimed features.

In view of the foregoing, it is respectfully requested that the aforementioned anticipation rejection of claims 1-9 and 13-26 be withdrawn.

III. THE OBVIOUSNESS REJECTION OF CLAIMS 10-12

On page 3 of the Office Action, claims 10-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sevrain (U.S. Patent Application Publication No. US2003/0135216A1). This rejection is hereby respectfully traversed.

Under 35 U.S.C. § 103, the Patent Office bears the burden of establishing a prima facie case of obviousness. In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). The Patent Office can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of references. Id. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). That is, under 35 U.S.C. § 103, teachings of references can be combined only if there is some suggestion or motivation to do so. Id. However, the motivation cannot come from the applicant's invention itself. In re Oetiker, 977 F.2d 1443, 1447, 24 USPQ2d 1443, 1446 (Fed. Cir. 1992). Rather, there must be some reason, suggestion, or

motivation found in the prior art whereby a person of ordinary skill in the art would make the combination. Id.

Regarding claim 10, the Examiner asserts that Sevrain discloses the claimed invention. However, it is respectfully submitted that Sevrain fails to disclose, or even suggest, a shaft of a vertebral screw having a coupling portion configured to couple with a guide member, and inserting a connecting screw, which includes a first end configured to be received by the engaging portion of the vertebral screw and a second end, through the anterior side of the vertebra using the guide member, as claimed. Indeed, Sevrain fails to mention the use of any type of guide member that couples to a shaft of a vertebral screw, let alone a guide member that is then used to insert a connecting screw through an anterior side of a vertebra. Accordingly, it is respectfully submitted that claim 10 is allowable over Sevrain.

Regarding claims 11 and 12, these claims are dependent upon independent claim 10. Thus, since independent claim 10 should be allowable as discussed above, claims 11 and 12 should also be allowable at least by virtue of their dependency on independent claim 10. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

At this point Applicants would like to remind the Examiner

that, as stated in MPEP § 2143.03, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). That is, "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 10-12 be withdrawn.

IV. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

Respectfully submitted,

Hunton & Williams LLP

By: 

Thomas E. Anderson

Registration No. 37,063

TEA/vrp

Hunton & Williams LLP
1900 K Street, N.W.
Washington, D.C. 20006-1109
Telephone: (202) 955-1500
Facsimile: (202) 778-2201

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